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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,307	07/09/2001	Kaoru Kagami	10110-5	7761

7590

08/21/2003

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EXAMINER

LE, THANH TAM T

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,307

Applicant(s)

KAGAMI ET AL.

Examiner

Thanh-Tam T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,5,11,12,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 1-3,6-10,13-19 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figure 20 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-9, 13-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu et al. (6,404,954).

Regarding claims 1, 6 and 14-16, Zhu et al., figure 5, disclose an optical signal separating device comprising a plurality of optical multi/demultiplexers (abstract), each of the optical multi/demultiplexers (500, fiber-optic apparatus) comprising:

- an wavelength selection filter (503) for selectively transmitting light of a certain wavelength range and reflecting light of other wavelength ranges;
- a first optical system (A, attachment) having an optical fiber (not shown) for guiding light to be transferred to the wavelength selection filter from the wavelength selection filter;

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- a second optical system (B, attachment) having an optical fiber (not shown) for guiding light transferred from the wavelength selection filter. The second optical system being opposingly arranged to the first optical system while interposing the wavelength selection filter therebetween; and
- outer cylindrically shaped glass holders (507, 508 and 509, column 5, lines 5-6) for holding the optical first optical system, the optical and the second optical system secured thereto, respectively.

Wherein the plurality of optical multi/demultiplexers are sequently connected in series so as to connect the optical fiber for guiding light to be transferred from the wavelength section filter of the first optical system of a preceding sequentially connected optical multi/demultiplexer to an optical fiber, to thereby sequently separate light of a certain bandwidth from an inputted light signal including light of different wavelengths and output the light of the certain bandwidth from the optical fiber of the second optical system.

Zhu et al. disclose the instant claimed invention as described above except for an outer cylindrically shaped glass holder for holding therein the optical filter, the first optical system and the second optical system secured thereto.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zhu et al. to have an outer cylindrically shaped glass holder for holding therein the wavelength selection filter, the first optical system and the second optical system secured thereto, since it has been held that forming in one piece an article which has formerly been formed in three pieces and put together involves only

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routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893), in order to easily assemble the optical filtering module.

Regarding claims 2, 7 and 17, figure 5, each of the first and second optical systems comprising a lens (502, 504) optically connecting the wavelength selection fiber and the optical filter respectively. The wavelength selection filter being secured to one of the lenses of the first and second optical systems.

Regarding claims 3, 8 and 18, figure 5, each of the first and second optical systems comprising an optical fiber holder (501, 505) which having a through hole (not shown) for receiving the optical fiber inserted therein.

Regarding claim 9, Zhu et al. disclose the instant claimed invention as described above except for the optical holder of the first optical system having a rectangular through hole.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Zhu et al.'s through hole to have a rectangular through hole, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955), in order to have alternative size for the through hole.

Regarding claims 13 and 22, the lenses of the first and second optical systems are graded index lenses having a pitch not less than 0.2 and not larger than 0.25 (column 4, line 64-66).

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4. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu et al. in view of Pan (5,359,683).

Zhu et al. disclose the instant claimed invention as described above except for the optical fiber holder is made of glass.

Pan, figure 3, discloses fibers 10 and 12 are sealed in a cylindrical glass ferrule (24, column 3, lines 39-40) which read on the optical fiber holder is made of glass. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Zhu et al.'s fiber holder to have the glass ferrule as taught by Pan, in order to have alternative material to hold the fibers.

Allowable Subject Matter

5. Claims 4-5, 11-12 and 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an examiner's statement of reasons for allowance:

None of the reference discloses each of the first and second optical systems comprising an inner holder. The inner holder being secured to the outer holder with a photo-curing adhesive, in combination with the other claimed elements of the embodiments recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

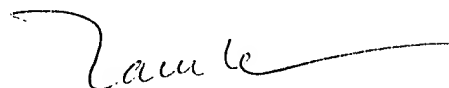
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is (703) 306-5711. The examiner can normally be reached on 7:30-5:00.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

TL.
July 31, 2003.



Thanh-Tam Le
AU.2839.

